

Application No: 10/500,907

Docket No.: Q121-US4

Page 3

**IN THE CLAIMS**

Please amend the claims as follows:

1.-49. (canceled)

50. (currently amended) An implantable medical device, comprising:

an implantable medical device housing that includes ~~comprising~~ a housing wall of biocompatible material defining an interior volume;

a battery including ~~comprising~~ an electrode assembly housed in a battery case and capable of producing a temperature greater than a temperature T1, the said battery mounted within the said interior volume; and

heat absorbing material exhibiting a phase change at the said temperature T1 and positioned external to the said electrode assembly for reducing the amplitude of a temperature excursion of the implantable medical device housing to prevent significant damage to body tissue.

51. (currently amended) The device of claim 50, wherein the said heat absorbing material is positioned within the said battery case.

52. (currently amended) The device of claim 50, wherein the said heat absorbing material is positioned between the said battery case and the said device housing.

53. (currently amended) The device of claim 52, wherein the said battery case has a case wall outer surface, and wherein the said heat absorbing material contacts the said case wall outer surface.

54. (currently amended) The device of claim 52, further comprising:

an outer casing mounted within the said interior volume; wherein

the said battery is mounted within the said outer casing; and

the said heat absorbing material is contained between the said battery case and the said outer casing.

Application No: 10/500,907      Docket No.: Q121-US4

Page 4

55. (currently amended) The device of claim 54, further comprising:  
at least a second battery mounted within the said outer casing.
56. (currently amended) The device of claim 54, wherein the said outer casing is formed  
of a polymer.
57. (currently amended) The device of claim 52, further comprising:  
a caddy containing the said heat absorbing material and attached to the said  
battery case.
58. (currently amended) The device of claim 50, further ~~comprising~~ comprising:  
a fibrous containment mat embedded in the said heat absorbing material.
59. (currently amended) The device of claim 58, wherein the said fibrous containment  
mat includes ~~comprises~~ dielectric fibers.
60. (currently amended) The device of claim 58, wherein the said fibrous containment  
mat includes ~~comprises~~ Kevlar.
61. (currently amended) The device of claim 58, wherein the said fibrous containment  
mat includes ~~comprises~~ fiberglass.
62. (currently amended) The device of claim 50, wherein the said heat absorbing  
material includes ~~comprises~~ paraffin.
63. (currently amended) The device of claim 50, and further including dielectric spacers  
separating the said battery case from the said device housing.
64. (currently amended) The device of claim 50, wherein the said battery is a  
rechargeable battery.

Application No: 10/500,907      Docket No.: Q121-US4

Page 5

65. (currently amended) A device, comprising:

    a housing that includes ~~comprising~~ a wall defining an interior housing volume;  
    a battery including ~~comprising~~ an electrode assembly housed in a battery case and capable of producing a temperature greater than a temperature T1, the said battery mounted within the said interior volume with the said battery case spaced from the said housing; and

    a heat absorber mounted adjacent to and thermally coupled to the said battery case, the said heat absorber including ~~comprising~~ a heat absorbing material exhibiting a phase change at the said temperature T1.

66. (currently amended) The device of claim 65, and further including dielectric spacers separating the said battery case from the said housing.

67. (currently amended) The device of claim 65, wherein the said heat absorbing material is positioned within the said battery case.

68. (currently amended) The device of claim 65, wherein the said heat absorbing material is positioned between the said battery case and the said housing.

69. (currently amended) The device of claim 65, wherein the said battery case has a case wall outer surface, and wherein the said heat absorbing material contacts the said case wall outer surface.

70. (currently amended) The device of claim 65, further comprising:

    an outer casing mounted within the said interior volume; wherein  
    the said battery is mounted within the said outer casing; and  
    the said heat absorbing material is contained between the said battery case and the said outer casing.

71. (currently amended) The device of claim 70, further comprising:

Application No: 10/500,907      Docket No.: Q121-US4

Page 6

at least a second battery mounted within the said outer casing.

72. (currently amended) The device of claim 70, wherein the said outer casing is formed of a polymer.

73. (currently amended) The device of claim 65, wherein the said heat absorber ~~further comprises:~~ includes a caddy containing the said heat absorbing material and attached to the said battery case.

74. (currently amended) The device of claim 65, wherein the said heat absorber ~~further comprises~~ includes a fibrous containment mat embedded in the said heat absorbing material.

75. (currently amended) The device of claim 74, wherein the said fibrous containment mat includes ~~comprises~~ dielectric fibers.

76. (currently amended) The device of claim 74, wherein the said fibrous containment mat includes ~~comprises~~ Kevlar.

77. (currently amended) The device of claim 74, wherein the said fibrous containment mat includes ~~comprises~~ fiberglass.

78. (currently amended) The device of claim 65, wherein the said heat absorbing material includes ~~comprises~~ paraffin.

79. (currently amended) The device of claim 65, wherein the said heat absorbing material includes ~~comprises~~ polyethylene.

80. (currently amended) The device of claim 65, wherein the said heat absorbing material includes ~~comprises~~ polypropylene.

Application No: 10/500,907      Docket No.: Q121-US4

Page 7

81. (currently amended) The device of claim 65, wherein the said battery is a rechargeable battery.

82. (previously presented) A method for containing heat generated by a battery having a battery case within a housing, comprising:

- spacing the battery case from the housing;
- providing high heat capacity material in thermal contact with the battery case and spaced from the housing; and
- transferring the heat generated from the battery to the high heat capacity material in the form of latent heat of fusion of the high heat capacity material.

83. (previously presented) The method of claim 82, further comprising:

- forming an electrode assembly; and then
- mounting the high heat capacity material around the electrode assembly within the battery case and thermally coupled to the electrode assembly.

84. (previously presented) The method of claim 82, further comprising configuring the high heat capacity material to engage the outer surface of the battery case.

85. (previously presented) The method of claim 82, further comprising:

- accommodating the high heat capacity material within a caddy; and
- mounting the caddy to the outer surface of the battery case.

86. (previously presented) The method of claim 82, further comprising depositing the high heat capacity material on a fibrous mat.